Application No. 10/537,680 Filed: June 3, 2005 Group Art Unit: 3644

## **IN THE CLAIMS:**

Please cancel Claims 1 - 20, 22, 28, 34, 38 and 39.

Please add new Claims 40 - 45.

Please amend Claim 21 as follows:

1 - 20. (Canceled)

21. (Currently Amended) A method of aquaculture, comprising:

growing a photosynthetic first species in a first tank, water in the first tank having a first water chemistry;

providing the first species to a second species in a second tank that eats the first species, water in the second tank having a second water chemistry different from the first water chemistry; and

providing the second species to a fish in a third tank; and

wherein the second water chemistry has less nitrogenous waste and carbon

dioxide than the first water chemistry.

- 22. (Canceled)
- 23. (Original) The method of claim 21, wherein water in the third tank has a third water chemistry, different from both the first water chemistry and the second water chemistry.
- 24. (Original) The method of claim 21, wherein the first species is not provided to the fish.
- 25. (Original) The method of claim 21, further comprising the act of circulating water from the first tank to a filter dedicated to the first tank and back into the first tank.

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- 26. (Original) The method of claim 25, further comprising the act of circulating water from the second tank to a filter dedicated to the second tank and back into the second tank.
- 27. (Original) The method of claim 26, further comprising the act of circulating water from the third tank to a filter dedicated to the third tank and back into the third tank.
  - 28. (Canceled)
- 29. (Original) The method of claim 21, further comprising the act of providing a water storage device coupled to the first tank, the second tank and the third tank.
- 30. (Original) The method of claim 21, further comprising the act of activating a water transfer device to enable transfer of water between the third tank and the first tank.
- 31. (Original) The method of claim 30, wherein the act of activating is triggered by a nitrogen compound level of the water in the third tank.
- 32. (Original) The method of claim 30, wherein the act of activating is triggered by a nitrogen compound level of the water in the first tank.
- 33. (Original) The method of claim 30, wherein the act of activating is triggered by a water quantity in the first tank.
  - 34. (Canceled)
- 35. (Original) The method of claim 21, wherein the first species is a non-floating plant.
  - 36. (Original) The method of claim 21, wherein the fish is a sturgeon.

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- 37. (Original) The method of claim 21, wherein a ratio of volumes of water in the third tank and in the first tank is 2:1.
  - 38. (Canceled)
  - 39. (Canceled)
  - 40. (New) A method of aquaculture, comprising:

growing a photosynthetic first species in a first tank, water in the first tank having a first water chemistry;

providing the first species to a second species in a second tank that eats the first species, water in the second tank having a second water chemistry different from the first water chemistry;

providing the second species to a fish in a third tank; and

wherein the first species is phytoplankton and the second species is zooplankton.

- 41. (New) The method of claim 40, wherein water in the third tank has a third water chemistry, different from both the first water chemistry and the second water chemistry.
- 42. (New) The method of claim 40, wherein the first species is not provided to the fish.
  - 43. (New) A method of aquaculture, comprising:

growing a photosynthetic first species in a first tank, water in the first tank having a first water chemistry;

providing the first species to a second species in a second tank that eats the first species, water in the second tank having a second water chemistry different from the first water chemistry;

providing the second species to a fish in a third tank; and

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stripping carbon dioxide from the water in the third tank and supplying the carbon

dioxide to water in the first tank.

44. (New) The method of claim 43, wherein water in the third tank has a third water

chemistry, different from both the first water chemistry and the second water chemistry.

45. (New) The method of claim 43, wherein the first species is not provided to the

fish.

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